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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/873,014	06/01/2001	Theodore W. Nye	TRW(AP)5576	3227

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EXAMINER

ENGLISH, PETER C

ART UNIT

PAPER NUMBER

3616

DATE MAILED: 08/30/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.
09/873,014

Applicant(s)
Nye et al.

Examiner
Peter English

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on _____
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above, claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 2, and 10-14 is/are rejected.
- 7) ☒ Claim(s) 3-9 and 15 is/are objected to.
- 8) ☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on Jun 1, 2001 is/are a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
*See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s). 2 6) ☐ Other:

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DETAILED ACTION

Drawings

1. The drawings are objected to because: in Fig. 2, the lower occurrence of reference number 120 and its lead line should be deleted.
2. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: 60, mentioned at page 9, line 2.
3. A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Specification

4. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

The following errors are noted:

- at page 12, line 8, "as in" should be "as is";
 - at page 14, line 8, "rotor 110" should be "inner cylindrical wall 116";
 - at page 15, line 18, "that" should be deleted;
 - at page 22, line 4, "without" should be deleted;
 - at page 34, line 3, "equal" should be "equals"; and
 - at page 40, line 11, "will be described below" should be "described above".
- Appropriate correction is required.

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5. The specification is objected to because it describes the safety system shown in Fig. 1 as being able to detect that no force is being applied to the seat belt webbing when the tongue 28 is not latched in the buckle 36 (see page 32, lines 6-12; page 32, lines 18-23; page 33, lines 10-16; and page 33, line 23-page 34, line 3). This description is inaccurate. Since the force detector 176 is located on the buckle anchor 38 it is impossible for the force detector 176 to detect the amount of force on the seat belt webbing when the tongue 28 is not latched in the buckle 36. Appropriate correction is required.

Claim Objections

6. Claims 2 and 15 are objected to because of the following informalities:
claim 2 should end with a period; and
in claim 15, at line 6, "a" should be "the".
Appropriate correction is required.

Claim Rejections - 35 USC § 112

7. Claim 14 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 14, at lines 8-9, the term "the signal from the proximity sensor" is indefinite because a proximity sensor is only one of the possible sensors listed at lines 2-3. The examiner suggests: at lines 8-9, change "from the proximity sensor" to "indicative of the impending condition".

Claim Rejections - 35 USC § 102

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

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A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

9. Claims 1, 2 and 10-13 are rejected under 35 U.S.C. 102(b) as being anticipated by Frantom et al. (US 4,655,312). Frantom et al. discloses a seat belt system comprising: a seat belt 10 wound on a retractor 14; a reversible electric motor 42 that drives a spool 282 of the retractor 14 via a gear assembly 284, 286; a controller 28 for controlling the motor 42; and a crash sensor 32 that supplies a crash signal to the controller 28. When no crash signal is produced by the sensor 32, the controller 28 operates the motor 42 to extend and retract the seat belt 10 (see column 5, lines 17-68). In response to a crash signal from the sensor 32, the controller 28 operates the motor 42 to pretension the seat belt 10 (see column 6, lines 1-9). For pretensioning the motor 42 is operated at a higher power level for a brief period (see column 5, lines 4-14).

Claim Rejections - 35 USC § 103

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was

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made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

12. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Frantom et al. (US 4,655,312) in view of Behr (US 5,558,370). Frantom et al. (see explanation in item 9 above) lacks a proximity sensor for pretensioning the seat belt in advance of a crash. Behr teaches such a proximity sensor 26 (see column 5, line 59-column 6, line 15). From this teaching of Behr, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Frantom et al. by providing a proximity sensor for pretensioning the seat belt in advance of a crash in order to place an occupant in a proper seating position in advance of a crash, thereby enhancing occupant safety.

Allowable Subject Matter

13. Claims 3-9 and 15 objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

14. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Maekawa et al., Yanagi et al. and JP 10-167003 teach retractors having electric motors used to pretension seat belts. JP 10-167006 teaches a retractor driven by an electric motor and having a lock mechanism for preventing seat belt extraction when the motor is not energized.

15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Peter English whose telephone number is (703) 308-1377. The examiner can normally be reached on Monday-Thursday from 7:00 to 5:30.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul Dickson, can be reached on (703) 308-2089.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-1113.


Any response to this action should be mailed to:

Commissioner for Patents
Washington, DC 20231

or faxed to:

(703) 872-9326 (for informal or draft communications, please clearly label
"PROPOSED" or "DRAFT")

Hand delivered responses should be brought to the Group receptionist on the 7th Floor of Crystal Park 5, 2451 Crystal Drive, Arlington, Virginia.


PETER C. ENGLISH 8/26/02
PRIMARY EXAMINER

pe
August 26, 2002